## **CLAIMS AMENDMENTS**

1. - 20. (cancelled).

21. (currently amended) Process to produce hydrazides and their derivatives, characterized in that comprising the reaction of a dicarboxylic acid having general formula (I):

$$(R^1CH)_n (COOH)_2$$
 (I)

wherein **R1** can be hydrogen, alkyl, alkenyl, alkinyl alkynyl, phenyl, aromatic heterocyclic ring containing as heteroatom S, O and/or N, heterocyclic non-aromatic ring containing as heteroatom S, O and/or N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, cycloalkinyl cycloalkynyl containing from 3 <u>7</u> to 8 carbon atoms; all the described groups can be further substituted and/or branched;

n varies from is 1 to or 2;

with a hydrazine of general formula (II)

wherein **R2** and **R3** are, independently, hydrogen, alkyl, alkenyl, alkinyl alkynyl, phenyl, heterocyclic aromatics containing as heteroatom S, O and/or N, heterocyclic non-aromatics containing as heteroatom S, O and/or N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, eycloalkinyl cycloalkynyl containing from 3 <u>7</u> to 8 carbon atoms;

wherein the hydrazine is soluble in water on in the reaction solvent; in the presence of a Lewis acid.

22. (currently amended) Process to produce hydrazides and their derivatives, characterized in that comprising the reaction of a dicarboxylic acid having general formula (III):

wherein **A** can be an aromatic heterocyclic ring containing from 4 to 8 atoms, a non-aromatic ring containing from 4 to 8 atoms, an aromatic heterocyclic ring containing from 4 to 8 atoms, wherein the heteroatom is S, O and/or N, a non-aromatic heterocyclic ring containing from 4 to 8 atoms, wherein the heteroatom is S, O and/or N; all the described groups can be further substituted and/or branched; ring **A** can further have 1 or more <u>fused ring</u>, wherein the ring is aromatic, non-aromatic, aromatic heterocyclic, non-aromatic heterocyclic rings and mixtures thereof, coupled, wherein the heteroatom can be N, O, and/or S;

X can be is C or N;

Y can be is C or N;

with a hydrazine of a general formula (II)

wherein **R2** and **R3** are, independently, hydrogen, alkyl, alkenyl, alkinyl alkynyl, phenyl, heterocyclic aromatics containing as heteroatom S, O and/or N, heterocyclic non-aromatics containing as heteroatom S, O and/or N, cycloalkyl containing from 3 to 8 carbon atoms, cycloalkenyl containing from 3 to 8 carbon atoms, eycloalkinyl containing from 3 <u>7</u> to 8 carbon atoms;

wherein the hydrazine is soluble in water or in the reaction solvent; in the presence of a Lewis acid.

- 23. (currently amended) Process, in accordance according to claim 21, characterized in that wherein the Lewis acid is a halide donator.
- 24. (currently amended) Process, in accordance according to claim 23, wherein the Lewis acid is an a halide donator chosen from the group consisting of aluminum chloride, antimony trichloride, antimony pentachloride, arsenic trichloride, arsenic pentachloride, beryllium chloride, bismuth trichloride, boron trifluoride, boron trichloride, cadmium chloride, copper chloride (I), copper chloride (II), cobalt chloride, chromo trichloride, gallium chloride, iron chloride (III), mercury chloride (II), magnesium chloride, magnesium bromide, nickel chloride, niobium pentachloride, titanium dichloride, titanium trichloride, titanium tetrachloride, tellurium tetrachloride, uranium tetrachloride, zinc chloride and mixture mixtures of them.
- 25. (currently amended) Process, in accordance according to claim 24, characterized in that wherein the halide donator Lewis acid is niobium pentachloride.
- 26. (currently amended) Process, in accordance according to claim 21, characterized in that wherein the dicarboxylic acid is suspended in an organic solvent.
- 27. (currently amended) Process, in accordance according to claim 26, characterized in that wherein the organic solvent is an aprotic polar organic solvent.
- 28. (currently amended) Process, in accordance according to claim 27, characterized in that wherein the solvent is chosen from the group consisting of dioxane, acetone, methylpyrrolidone, dimethylsulfoxide, N,N-dimethylformamide, and mixture mixtures of them.
- 29. (cancelled).

- 30. (currently amended) Process, in accordance according to claim 29 21, characterized by further comprising the reaction of 1-nitro-phtalic acid with the hydrazine in the presence of niobium pentachloride.
- 31. (currently amended) Process, in accordance according to claim 30, characterized in that wherein the Lewis acid is a halide donator.
- 32. (currently amended) Process, in accordance according to claim 31, wherein the Lewis acid is an a halide donator chosen from the group consisting of aluminum chloride, antimony trichloride, antimony pentachloride, arsenic trichloride, arsenic pentachloride, beryllium chloride, bismuth trichloride, boron trifluoride, boron trichloride, cadmium chloride, copper chloride (I), copper chloride (II), cobalt chloride, chromo trichloride, gallium chloride, iron chloride (III), mercury chloride (II), magnesium chloride, magnesium bromide, nickel chloride, niobium pentachloride, titanium dichloride, titanium trichloride, titanium tetrachloride, tellurium tetrachloride, uranium tetrachloride, zinc chloride and mixture mixtures of them.
- 33. (currently amended) Process, in accordance according to claim 32, characterized in that wherein the halide donator Lewis acid is niobium pentachloride.
- 34. (currently amended) Process, in accordance according to claim 22, characterized in that wherein the dicarboxylic acid is suspended in an organic solvent.
- 35. (currently amended) Process, in accordance according to claim 34, characterized in that wherein the organic solvent is an aprotic polar organic solvent.
- 36. (currently amended) Process, in accordance according to claim 35, characterized in that wherein the solvent is chosen from the group consisting of dioxane, acetone, methylpyrrolidone, dimethylsulfoxide, N,N-dimethylformamide, and mixture mixtures of them.

- 37. (cancelled).
- 38. (currently amended) Process, in accordance according to claim 37 22, characterized by further comprising the reaction of 1-nitro-phtalic acid with the hydrazine in the presence of niobium pentachloride.